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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,174	01/03/2002	Leon J. Stanger	PD-200226	7829
20991	7590	05/09/2006	EXAMINER	
THE DIRECTV GROUP INC			JUNG, MIN	
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DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,174

Applicant(s)

STANGER ET AL.

Examiner

Min Jung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-18 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-15 and 28 is/are allowed.
- 6) ☒ Claim(s) 16-18,21,23,29 and 30 is/are rejected.
- 7) ☒ Claim(s) 20,22 and 24-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16, 18, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Arazi et al., US 5,966,120 (Arazi).

Arazi discloses a method and apparatus for combining and distributing data with pre-formatted real-time video.

Specifically regarding claim 16, Arazi teaches a method of adding auxiliary data to a data stream, comprising the steps of : accepting a statistically multiplexed data stream having null data (the output of the Program mux 110 inserted with fill packets, col. 6, lines 27-34); and substituting at least a portion of the auxiliary data for the null data in the statistically multiplexed data stream (auxiliary data replaces fill packets, col. 6, lines 37-40); and controlling an amount of the null data in the statistically multiplexed data stream to provide sufficient null data to permit the substitution of at least some of the auxiliary data in the statistically multiplexed data stream (col. 6, line 45 – col. 7, line 25). The amount of the null data is controlled because there is a teaching that the duration of the fill packet is at least N cycles when at least one auxiliary data packet can be inserted. See col. 6, lines 59-67, and col. 7, lines 16-18.

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Regarding claim 18, Arazi further teaches buffering the auxiliary data until there is sufficient null data to permit the substitution of the at least some of the auxiliary data in the statistically multiplexed data stream. See col. 7, lines 19-25, and 43-46. Auxiliary data is buffered via buffer 290 from the auxiliary data storage 130 until there is sufficient fill packet (at least N cycles).

Regarding claim 21, Arazi further teaches that the null data comprises statistical multiplexer null data (Program MUX inserts fill packets into the video data stream, col. 6, lines 27-29).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi.

Regarding claim 23, Arazi fail to specifically teach that the null data comprises encoder null data. However, from Arazi's teaching of inserting the fill packet at the multiplexer, and from the fact that fill packet (or null data) are used commonly in the field of the invention to maintain continuity of data stream, it would have been obvious for one of ordinary skill in the art at the time of the invention to utilize the concept of

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using null data at the encoder stage to provide a continuous stream of video data to the multiplexer

5. Claims 17, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi et al., 5,966,120 (Arazi) in view of Citta et al., US 5,461,619 (Citta).

Arazi teaches accepting a statistically multiplexed data stream having null data; and substituting at least a portion of the auxiliary data for the null data in the statistically multiplexed data stream (See col. 6, lines 27-44), and controlling an amount of the null data in the statistically multiplexed data stream to provide sufficient null data to permit the substitution of at least some of the auxiliary data in the statistically multiplexed data stream (col. 6, line 45 – col. 7, line 25). Arazi fails to specifically teach that the auxiliary data is non-opportunistic data. Citta teaches multiplexed transmission of compressed video and auxiliary data, wherein the auxiliary data may be a real-time data (non-opportunistic data). See col. 3, lines 38-43, the non-opportunistic data being an audio signal accompanying the compressed video signal. Citta also teaches that the multiplexer is controlled to vary the ratio of the components, implying that statistical multiplexing is performed. See Abstract. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement Arazi's teaching by supplying non-opportunistic data as the auxiliary data as taught by Citta, in order to send real-time data in the available bandwidth in the statistically multiplexed data stream.

Regarding claim 30, Arazi further teaches buffering the auxiliary data until there is sufficient null data to permit the substitution of the at least some of the auxiliary data in the statistically multiplexed data stream: See col. 7, lines 19-25, and 43-46. Auxiliary data is buffered via buffer 290 from the auxiliary data storage 130 until there is sufficient fill packet (at least N cycles).

Allowable Subject Matter

6. Claims 1, 3-15, and 28 are allowed.
7. Claims 20, 22, and 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed February 16, 2006 have been fully considered but they are not persuasive. At the paragraph bridging page 13 and 14 of the response, applicant argues that Arazi "does not disclose a statistical multiplexer, nor does it disclose controlling the amount of null data to permit at least some of the auxiliary data can be substituted for null data." On the contrary, Arazi clearly teaches a statistical multiplexing (see the claims), and controlling of the amount of null data for substituting in the auxiliary data (see col. 6, line 45 – col. 7, line 25). The amount of null data is controlled for substitution in the sense that a fixed duration of fill packet is detected

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before granting the substitution with the auxiliary data. Therefore, the teaching of Arazi is deemed to cover the broad scope of claim language used in the rejected claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Delpuch et al. patent, and the Rao patent, are cited for further references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday through Friday 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
May 4, 2006


Min Jung
Primary Examiner